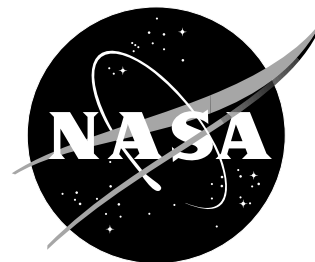


# NewsRelease

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**SUN-EARTH DAY, APRIL 27, 2001**

## **NASA promotes radiant relationship**

NASA Langley Research Center invites "bright" students to explore the complex relationship between our world and its closest star, the sun. Sun-Earth Day, April 27, is a national celebration of the sun and the space around the globe (geospace) reflecting on how the relationship affects life on Earth.

In southeastern Virginia, classrooms will make the Sun-Earth connection through two NASA Langley outreach programs. Students On-Line Atmospheric Research (SOLAR) and Students' Cloud Observations On-Line (S'COOL) have science activities for schools April 23 - 27. Sun angle measurements from this week are being entered into an Internet-accessible data table where students can compare their observations with other entries from around the globe.

SOLAR introduces students and teachers to one of NASA's major satellite-based programs designed to study the Earth's atmosphere, the Stratospheric Aerosol and Gas Experiment III (SAGE III). S'COOL is part of NASA's Clouds and the Earth's Radiant Energy System (CERES) satellite experiment. Both programs are led and based at Langley Research Center.

CERES researchers are training students worldwide to observe clouds and enter their data into a NASA computer. The students' observations are compared to those from orbiting CERES instruments. For Sun-Earth Day, CERES students will add sun angle and temperature measurements to their cloud observations. These will be cross-referenced to the Sun-Earth Day data table so students can compare temperature with solar elevation. Researchers can accurately calculate the total solar energy if they know the sun's elevation angle.

In addition to sun angle readings, SOLAR students measure light intensity with a sun photometer. This is similar to the satellite instrument used in the SAGE III experiment; both view the sun through the Earth's atmosphere to determine the atmosphere's optical depth.

Over 1,000 schools participate in the S'COOL and SOLAR programs worldwide. Students make observations and enter data from every continent except Antarctica.

Sun-Earth Day 2001 is sponsored by NASA's Sun-Earth Connection Education Forum, the joint European Space Agency (ESA)-NASA Solar and Heliospheric Observatory Mission, and The Astronomical League -- sponsors of National Astronomy Day.

For more on-line information about Sun-Earth Day, S'COOL and SOLAR:

<http://asd-www.larc.nasa.gov/SCOOL/sun-earth.html>

<http://asd-www.larc.nasa.gov/SCOOL/>

<http://www-sage3.larc.nasa.gov/solar/>

[http://sunearth.gsfc.nasa.gov/SECEF\\_SunEarthDay/](http://sunearth.gsfc.nasa.gov/SECEF_SunEarthDay/)

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